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## CARDIAC FUNCTION AND HEART FAILURE

# DIABETES IS AN INDEPENDENT RISK FACTOR FOR HEART FAILURE AMONG COMMUNITY DWELLING OLDER ADULTS

ACC Poster Contributions
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**Background:** Diabetes (DM) is a major cardiovascular (CV) risk factor. However, to what extent this is due to confounding factors is unclear. We used propensity score matching to determine if DM is independently associated with incident heart failure (HF).

**Methods:** Of the 5795 participants ≥65 years, in the NHLBI-funded prospective Cardiovascular Health Study, 5716 had baseline fasting blood glucose (FBG), of which 930 had baseline DM, defined by American Diabetes Association (ADA) criteria of FBG of ≥126 mg/dL. Propensity scores for DM, calculated for each patient, were used to assemble 765 pairs of participants with and without DM, who were balanced on 65 baseline characteristics. Matched Cox regression models were used to estimate effects of DM on centrally adjudicated incident HF and all-cause mortality as well as CV morbidity during over 13 years of follow-up.

**Results:** Matched participants had a mean (±SD) age of 73 (±6) years, 51% were women, and 21% were African American. Incident HF occurred in 31% and 26% of matched participants with and without DM respectively (matched HR, 1.45; 95% CI, 1.14-1.86; P=0.003; Figure). All-cause mortality occurred in 57% and 47% of matched participants with and without DM respectively (matched HR, 1.35; 95% CI, 1.13-1.61; P=0.001). The effect of DM on other cardiovascular outcomes will be presented.

**Conclusion:** Among ambulatory community dwelling older adults without HF, baseline DM was a strong and independent predictor of incident HF.

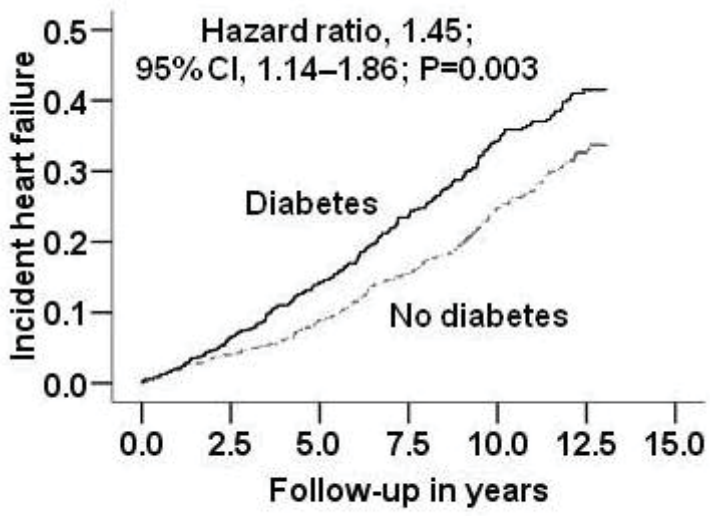


Figure 1